

What is claimed is:

1. A washing device for an impression cylinder jacket in a sheet-fed offset two-sided printing press equipped with an impression cylinder installed with a jacket having a flexible metal plate, a base layer formed to have concave-convex profile on the surface of said metal plate and a low surface energy resin layer formed on said base layer, comprising:

a cleaning unit capable of being in contact with or separated from a blanket cylinder that opposes said impression cylinder;

a water dampening unit equipped with a water form roller capable of being in contact with or separated from a plate cylinder that opposes said blanket cylinder and supplying water to said plate cylinder;

an inking unit equipped with an ink form roller capable of being in contact with or separated from said plate cylinder and supplying ink to said plate cylinder; and

a controller that executes a first control of causing said plate cylinder to contact with said blanket cylinder and said blanket cylinder to contact with said impression cylinder, and causes each cylinder to rotate under those contacts for a specified period of time while said cleaning unit is in contact with said blanket cylinder; and a second control of separating said plate cylinder from said blanket cylinder, and causing said water form roller and said ink form roller with said plate cylinder.

2. A washing device for an impression cylinder jacket as claimed in claim 1, wherein

said controller, in executing said first control, after causing said blanket cylinder to rotate for a specified period of time while keeping said plate cylinder separated from said

blanket cylinder and said blanket cylinder separated from
said impression cylinder while keeping said cleaning unit
in contact with said blanket cylinder, causes each cylinder
to rotate for a specified period of time keeping said plate
5 cylinder in contact with said blanket cylinder and said blanket
cylinder in contact with said impression cylinder while
keeping said cleaning unit in contact with said blanket
cylinder.

3. A washing device for an impression cylinder jacket
10 as claimed in claim 1, wherein

said cleaning unit is a nonwoven fabric cloth
impregnated with washing liquid which is supplied during a
washing process.

4. A washing device for an impression cylinder jacket
15 as claimed in claim 3, wherein

said washing liquid is washing solvent and water and
the washing solvent and water is supplied alternately during
the washing process.

5. A washing device for an impression cylinder jacket
20 as claimed in claim 4, wherein

said first control ends when washing with supplied water
ends.

6. A washing device for an impression cylinder jacket
as claimed in claim 1, wherein

25 said cleaning unit is a brush to which washing liquid
which is supplied during a washing process.

7. A washing device for an impression cylinder jacket
as claimed in claim 6, wherein

said washing liquid is washing solvent and water and
30 the washing solvent and water is supplied alternately during
the washing process.

8. A washing device for an impression cylinder jacket

as claimed in claim 7, wherein

said first control ends when washing with supplied water ends.

9. A washing device for an impression cylinder jacket
5 as claimed in claim 1, wherein

said cleaning unit is a nonwoven fabric cloth impregnated with the washing liquid in prior to the washing process.

10. A washing device for an impression cylinder jacket
10 as claimed in claim 9, wherein

said controller causes said water form roller to contact with said plate cylinder after causing said ink form roller to contact with said plate cylinder in executing said second control.

15 11. A washing device for an impression cylinder jacket as claimed in claim 1, wherein

in causing said plate cylinder to contact with said blanket cylinder and said blanket cylinder to contact with said impression cylinder in said first control, said
20 controller causes said blanket cylinder to move to contact with said impression cylinder either simultaneous with or after causing said plate cylinder to contact with said blanket cylinder.

25 12. A washing device for an impression cylinder jacket as claimed in claim 1, wherein

said base layer is a metal thermal sprayed layer formed by thermally spraying metal.

13. A washing device for an impression cylinder jacket
as claimed in claim 1, wherein

30 said base layer comprises a metal thermal sprayed layer formed by thermally spraying metal, and a porous ceramic thermal sprayed layer formed by thermally spraying ceramics

on top of said metal thermal sprayed layer .

14. A washing device for an impression cylinder jacket as claimed in claim 1, wherein

said low surface energy resin is a silicone group resin.

5 15. A washing method for an impression cylinder jacket in a sheet-fed offset two-sided printing press equipped with an impression cylinder installed with a jacket having a flexible metal plate, a base layer formed to have concave-convex profile on the surface of said metal plate
10 and a low surface energy resin layer formed on said base layer, comprising the steps of:

1) rotating said impression cylinder, a blanket cylinder opposing said impression cylinder, and a plate cylinder opposing said blanket cylinder;

15 2) causing a cleaning unit capable of being in contact with or separated from said blanket cylinder to contact with said blanket cylinder;

3) causing said plate cylinder to contact with said blanket cylinder and said blanket cylinder to contact with
20 said impression cylinder while keeping said cleaning unit in contact with said blanket cylinder;

4) separating said plate cylinder from said blanket cylinder after causing each cylinder to rotate in such contacts for a specified period of time; and

25 5) causing a water form roller capable of being in contact with or separated from said plate cylinder in a water dampening unit capable of supplying water to said plate cylinder, and an ink form roller capable of being in contact with or separated from said plate cylinder in an inking unit to contact with
30 said plate cylinder.

16. A washing method for an impression cylinder jacket as claimed in claim 15, wherein

said step 3) is a step for causing said blanket cylinder to contact said impression cylinder simultaneous with or after causing said plate cylinder to contact with said blanket cylinder.